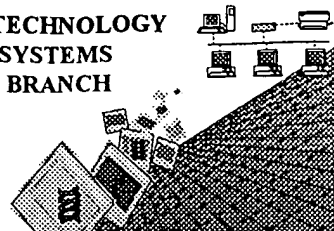


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/876,257
Source: 1600
Date Processed by STIC: 7/24/2002

RECEIVED

AUG 01 2002

TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/876,257

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length
The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering
The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 ✓ Variable Length
Sequence(s) 2 and 6 contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES)
Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
 (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220>
Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

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1600

RAW SEQUENCE LISTING

DATE: 07/24/2002

PATENT APPLICATION: US/09/876,257

TIME: 10:54:43

Input Set : A:\EP.txt

Output Set: N:\CRF3\07242002\I876257.raw

Does Not Comply
Corrected Diskette Needed

pp 1,3-5

3 <110> APPLICANT: Meloen, Robert H
 4 Oonk, Hendrica B
 6 <120> TITLE OF INVENTION: PEPTIDE, IMMUNOGENIC COMPOSITION AND VACCINE OR MEDICAL
 PREPARATION, A
 7 METHOD TO IMMUNISE ANIMALS AGAINST THE HORMONE LHRH, AND ANALOGS OF THE LHRH
 8 TANDEM REPEAT PEPTIDE AND THEIR USE AS VACCINE
 10 <130> FILE REFERENCE: 3516.2US
 12 <140> CURRENT APPLICATION NUMBER: US 09/876,257
 13 <141> CURRENT FILING DATE: 2001-06-06
 15 <160> NUMBER OF SEQ ID NOS: 6
 17 <170> SOFTWARE: PatentIn version 3.1
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 10
 21 <212> TYPE: PRT
 22 <213> ORGANISM: Unknown
 24 <220> FEATURE:
 25 <223> OTHER INFORMATION: Luteinising Hormone Releasing Hormone (LHRH) from the
 hypothalamu
 26 s of an undisclosed mammal.
 28 <220> FEATURE:
 29 <221> NAME/KEY: misc_feature
 30 <222> LOCATION: (1)..(1)
 31 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid
 34 <220> FEATURE:
 35 <221> NAME/KEY: misc_feature
 36 <222> LOCATION: (10)..(10)
 37 <223> OTHER INFORMATION: X at position 10 = glycine amide
 40 <400> SEQUENCE: 1
 42 Xaa His Trp Ser Tyr Gly Leu Arg Pro Xaa
 43 1 5 10
 46 <210> SEQ ID NO: 2
 47 <211> LENGTH: 21
 48 <212> TYPE: PRT
 49 <213> ORGANISM: Artificial Sequence
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an undisclosed
 mamm
 53 al.
 55 <220> FEATURE:
 56 <221> NAME/KEY: misc_feature
 57 <222> LOCATION: (1)..(1)
 58 <223> OTHER INFORMATION: X at position 1 = preferably pyroglutamic acid, but can also
 be g
 59 lutamine having attached thereto a tail comprising one or more ad

60 ditional amino acids
63 <220> FEATURE:
64 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/876,257

DATE: 07/24/2002

TIME: 10:54:43

Input Set : A:\EP.txt

Output Set: N:\CRF3\07242002\I876257.raw

65 <222> LOCATION: (3)..(3)
 66 <223> OTHER INFORMATION: X at position 3 = tryptophan or formylated tryptophan
 69 <220> FEATURE:
 70 <221> NAME/KEY: misc_feature
 71 <222> LOCATION: (14)..(14)
 72 <223> OTHER INFORMATION: X at position 14 = tryptophan or formylated tryptophan
 75 <220> FEATURE:
 76 <221> NAME/KEY: misc_feature
 77 <222> LOCATION: (10)..(20)
 78 <223> OTHER INFORMATION: The sequence comprising residues 10-20 may be repeated.
 81 <220> FEATURE:
 82 <221> NAME/KEY: misc_feature
 83 <222> LOCATION: (11)..(11)
 84 <223> OTHER INFORMATION: X at position 11 = either a direct bond or a spacer group
 between
 85 the amino acids glycine and glutamine; the spacer group may great
 86 tly vary from one or more amino acids to a shorter or longer hydr
 87 ocarbon chain and other compound groups or molecules.
 90 <220> FEATURE:
 91 <221> NAME/KEY: misc_feature
 92 <222> LOCATION: (21)..(21)
 93 <223> OTHER INFORMATION: X at position 21 = either Gly-NH2 or Gly having attached
 thereto
 94 a tail comprising one or more additional amino acids; preferably
 95 Gly-Cys-NH2, the C terminal cysteine being added in connection wi
 96 th a possible coupling of the peptide to a carrier protein.
 99 <400> SEQUENCE: 2
 W--> 101 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Xaa Gln His Xaa Ser Tyr
 102 1 5 10 15
 W--> 105 Gly Leu Arg Pro Xaa
 106 20
 109 <210> SEQ ID NO: 3
 110 <211> LENGTH: 22
 111 <212> TYPE: PRT
 112 <213> ORGANISM: Artificial Sequence
 114 <220> FEATURE:
 115 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an undisclosed
 mamm
 116 al.
 118 <220> FEATURE:
 119 <221> NAME/KEY: misc_feature
 120 <222> LOCATION: (1)..(1)
 121 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid
 124 <220> FEATURE:
 125 <221> NAME/KEY: misc_feature
 126 <222> LOCATION: (3)..(3)
 127 <223> OTHER INFORMATION: X at position 3 = tryptophan or N-formyl-Trp
 130 <220> FEATURE:
 131 <221> NAME/KEY: misc_feature
 132 <222> LOCATION: (13)..(13)
 133 <223> OTHER INFORMATION: X at position 13 = tryptophan or N-formyl-Trp
 136 <220> FEATURE:

*Xaa can only represent a
single amino acid.*

see item 5

on Error

summary sheet

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/876,257

DATE: 07/24/2002

TIME: 10:54:43

Input Set : A:\EP.txt

Output Set: N:\CRF3\07242002\I876257.raw

137 <221> NAME/KEY: misc_feature
 138 <222> LOCATION: (10)..(19)
 139 <223> OTHER INFORMATION: The sequence comprising residues 10-19 may be repeated.
 142 <220> FEATURE:
 143 <221> NAME/KEY: misc_feature
 144 <222> LOCATION: (22)..(22)
 145 <223> OTHER INFORMATION: X at position 22 = NH2
 148 <400> SEQUENCE: 3
 W--> 150 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Gln His Xaa Ser Tyr Gly
 151 1 5 10 15
 W--> 154 Leu Arg Pro Gly Cys Xaa
 155 20
 158 <210> SEQ ID NO: 4
 159 <211> LENGTH: 21
 160 <212> TYPE: PRT
 161 <213> ORGANISM: Artificial Sequence
 163 <220> FEATURE:
 164 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an undisclosed
 mamm
 165 al.
 167 <220> FEATURE:
 168 <221> NAME/KEY: misc_feature
 169 <222> LOCATION: (1)..(1)
 170 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid
 173 <220> FEATURE:
 174 <221> NAME/KEY: misc_feature
 175 <222> LOCATION: (6)..(6)
 176 <223> OTHER INFORMATION: X at position 6 = a possible replacement of glycine by a
 dextror
 177 otatory amino acid which in addition contains a side chain by whic
 178 h the LHRH tandem unit can be coupled to a carrier compound.
 181 <220> FEATURE:
 182 <221> NAME/KEY: misc_feature
 183 <222> LOCATION: (16)..(16)
 184 <223> OTHER INFORMATION: X at position 16 = a possible replacement of glycine by a
 dextror
 185 otatory amino acid which in addition contains a side chain by whi
 186 ch the LHRH tandem unit can be coupled to a carrier compound.
 189 <400> SEQUENCE: 4
 W--> 191 Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Gln His Trp Ser Tyr Xaa
 192 1 5 10 15
 195 Leu Arg Pro Gly Cys
 196 20
 199 <210> SEQ ID NO: 5
 200 <211> LENGTH: 11
 201 <212> TYPE: PRT
 202 <213> ORGANISM: Artificial Sequence
 204 <220> FEATURE:
 205 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an undisclosed
 mamm
 206 al.
 208 <220> FEATURE:
 209 <221> NAME/KEY: misc_feature

Xaa can only represent a
 single amino acid,
 nothing else.

RAW SEQUENCE LISTING

DATE: 07/24/2002

PATENT APPLICATION: US/09/876,257

TIME: 10:54:43

Input Set : A:\EP.txt

Output Set: N:\CRF3\07242002\I876257.raw

210 <222> LOCATION: (1)..(1)
 211 <223> OTHER INFORMATION: X at position 1 = pyroglutamic acid
 214 <220> FEATURE:
 215 <221> NAME/KEY: misc_feature
 216 <222> LOCATION: (6)..(6)
 217 <223> OTHER INFORMATION: X at position 6 = Gly or a dextrorotatory amino acid
 containing a
 218 side chain that allows coupling to a carrier compound.
 221 <400> SEQUENCE: 5
 W--> 223 Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Cys
 224 1 5 10
 227 <210> SEQ ID NO: 6
 228 <211> LENGTH: 21
 229 <212> TYPE: PRT
 230 <213> ORGANISM: Artificial Sequence
 232 <220> FEATURE:
 233 <223> OTHER INFORMATION: Vaccine against LHRH from the hypothalamus of an undisclosed
 mamm
 234 al.
 236 <220> FEATURE:
 237 <221> NAME/KEY: misc_feature
 238 <222> LOCATION: (21)..(21)
 239 <223> OTHER INFORMATION: X at position 21 = glycine amide or Gly-Cys
 242 <220> FEATURE:
 243 <221> NAME/KEY: misc_feature
 244 <222> LOCATION: (1)..(21)
 245 <223> OTHER INFORMATION: The initial cysteine of the peptide comprising residues 1-21
 is j
 246 oined to the initial cysteine of an identical peptide (residues 2
 247 2-42) to form a dimer.
 250 <220> FEATURE:
 251 <221> NAME/KEY: misc_feature
 252 <222> LOCATION: (1)..(1)
 253 <223> OTHER INFORMATION: X at position 1 = Cys-Gln
 256 <400> SEQUENCE: 6
 W--> 258 Xaa His Trp Ser Tyr Gly Leu Arg Pro Gly Gln His Trp Ser Tyr Gly
 259 1 5 10 15
 W--> 262 Leu Arg Pro Gly Xaa
 263 20

Xaa can only
 represent a
 single amino
 acid

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/876,257

DATE: 07/24/2002
TIME: 10:54:44

Input Set : A:\EP.txt
Output Set: N:\CRF3\07242002\I876257.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1,10 /
Seq#:2; Xaa Pos. 1,3,11,14,21 /
Seq#:3; Xaa Pos. 1,3,13,22 /
Seq#:4; Xaa Pos. 1,6,16 /
Seq#:5; Xaa Pos. 1,6 /
Seq#:6; Xaa Pos. 1,21